

Mineral Industry Surveys

For information, contact:

Robert G. Reese, Jr., Vanadium Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4981, Fax: (703) 648-7757
E-mail: rreese@usgs.gov

Eric Seavey (Data)
Telephone: (703) 648-7972
Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999
Internet: <http://minerals.usgs.gov/minerals>

VANADIUM IN MAY 2000

According to Metal Bulletin, U.S. ferrovanadium prices during May ranged from \$6.25 to \$6.50 per pound of vanadium content, compared with \$6.00 to \$6.50 in April. The range for European ferrovanadium prices was \$10.60 to \$11.60 per kilogram in May. In April, European ferrovanadium prices ranged from \$11.10 to \$12.90. For vanadium pentoxide, the May range as published by Metal Bulletin was \$2.10 to \$2.35 per pound, while in April it was \$2.15 to \$2.60 per pound.

Officials at International Uranium Corp. confirmed that they had

sold about 450 metric tons of the nearly 1,000 metric tons of vanadium pentoxide produced at their White Mesa Mill in the latter half of 1999 and in early 2000. The company indicated that it had no plans to process any additional ore (Ryan's Notes, 2000).

Reference Cited

Ryan's Notes, 2000, International Uranium Corp. (IUC): Ryan's Notes, v. 6, no. 18, May 1, p. 4.

TABLE 1
U.S. CONSUMPTION AND CONSUMER STOCKS OF VANADIUM, BY FORM 1/

(Kilograms, contained vanadium)

	1999 p/		2000			
			April		May	
	Consumption	Stocks	Consumption	Stocks	Consumption	Stocks
Ferrovanadium 2/	3,370,000	303,000	264,000 r/	289,000	261,000	304,000
Vanadium-aluminum alloy	W	13,100	W	12,400	W	13,100
Other 3/	460,000	9,790	36,100 r/	9,340 r/	35,600	9,810
Total	3,830,000	326,000	300,000 r/	311,000	297,000	327,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes other vanadium-iron-carbon alloys as well as vanadium oxides added directly to steel.

3/ Includes other vanadium alloys, vanadium metal, vanadium pentoxide, vanadates, chlorides, other specialty chemicals, and items indicated by symbol W.

TABLE 2
U.S. CONSUMPTION OF VANADIUM, BY END USE 1/

(Kilograms, contained vanadium)

	1999 p/	2000		
		April	May	Year to date
Steel:				
Carbon	1,160,000	99,400	88,700	496,000
High-strength low-alloy	949,000	82,200	70,500	402,000
Stainless and heat-resisting	81,500	W	W	W
Full alloy	840,000	49,600	49,600	268,000
Tool	343,000	W	W	W
Total steel	3,370,000	270,000 r/	266,000	1,430,000
Superalloys	15,400	1,210 r/	1,530	6,890
Miscellaneous and unspecified 2/	443,000	29,100	28,700	128,000
Total consumption	3,830,000	300,000 r/	297,000	1,560,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Total steel."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes cast irons, alloys excluding steel and superalloys, chemical and ceramic uses, and other miscellaneous and unspecified uses.

TABLE 3
U.S. IMPORTS AND EXPORTS OF ALUMINUM-VANADIUM MASTER ALLOY AND
VANADIUM METAL, INCLUDING WASTE AND SCRAP 1/

(Kilograms, gross weight)

	Aluminum-vanadium master alloy		Vanadium metal, including waste and scrap	
	Quantity	Value	Quantity	Value
Imports for consumption:				
1999	1,210,000	\$1,680,000	30,400	\$779,000
2000:				
February	--	--	473	19,800
March	--	--	1,560	87,300
April:				
Belgium	3,810	20,800	--	--
Russia	--	--	574	28,500
Total	3,810	20,800	574	28,500
Year to date	3,810	20,800	5,290	214,000
Exports:				
1999	514,000	6,440,000	177,000	3,200,000
2000:				
February	51,900	756,000	17,400	261,000
March	43,700	644,000	40	14,800
April:				
Canada	16,400	214,000	--	--
China	19,900	267,000	--	--
France	446	7,600	--	--
Germany	--	--	2	14,200
Israel	29,400	390,000	--	--
Japan	872	15,800	--	--
Mexico	20,400	266,000	--	--
United Kingdom	4,910	94,400	35,400	523,000
Total	92,300	1,250,000	35,400	537,000
Year to date	238,000	3,410,000	52,900	813,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 4
U.S. IMPORTS AND EXPORTS OF FERROVANADIUM, VANADIUM PENTOXIDE (ANHYDRIDE) AND
OTHER OXIDES AND HYDROXIDES OF VANADIUM 1/

(Kilograms, contained vanadium)

	Ferrovanadium		Vanadium pentoxide (anhydride) 2/		Other oxides and hydroxides of vanadium	
	Quantity	Value	Quantity	Value	Quantity	Value
Imports for consumption:						
1999	1,930,000	\$20,700,000	208,000	\$1,920,000	--	--
2000:						
February	157,000	1,330,000	95,500	782,000	--	--
March	118,000	1,120,000	84,200	693,000	4,500	\$76,200
April:						
Austria	14,500	183,000	--	--	--	--
Canada	59,000	484,000	--	--	--	--
China	52,600	462,000	--	--	--	--
Czech Republic	91,800	1,050,000	--	--	--	--
Japan	--	--	560	12,800	--	--
Luxembourg	--	--	--	--	50	3,000
South Africa	8,170	60,500	71,900	623,000	--	--
Total	226,000	2,240,000	72,400	636,000	50	3,000
Year to date	590,000	5,460,000	282,000	2,350,000	4,550	79,200
Exports:						
1999	213,000	3,180,000	747,000	4,270,000	69,700	656,000
2000:						
February	5,730	80,000	65,800	312,000	26,900	172,000
March	2,640	88,000	16,500	81,200	4,920	63,600
April:						
Belgium	--	--	56,000	200,000	--	--
India	--	--	--	--	1,360	16,700
Italy	--	--	16,000	91,700	--	--
Kuwait	--	--	--	--	430	3,820
Mexico	4,760	72,300	--	--	--	--
Panama	--	--	--	--	411	5,840
Total	4,760	72,300	72,000	292,000	2,200	26,400
Year to date	13,100	240,000	184,000	848,000	41,800	311,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ May include catalysts containing vanadium pentoxide.

Source: Bureau of the Census.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF VANADIUM-BEARING ASH, SLAG 1/

(Kilograms, contained vanadium pentoxide)

	Ash and residues		Ash and residues (not from the manufacture of iron and steel)		Slag, from the manufacture of iron and steel	
	Quantity	Value	Quantity	Value	Quantity	Value
1999	1,800,000	\$6,940,000	2,700,000	\$1,360,000	1,150,000	\$1,740,000
2000:						
February	111,000	103,000	248,000	134,000	--	--
March	178,000	186,000	284,000	122,000	--	--
April:						
Canada	--	--	416,000	151,000	--	--
Italy	161,000	126,000	--	--		
Mexico	31,800	30,700	--	--	--	--
Total	193,000	156,000	416,000	151,000	--	--
Year to date	577,000	520,000	1,450,000	577,000	--	--

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MISCELLANEOUS
VANADIUM CHEMICALS 1/

(Kilograms, contained vanadium)

	Sulfates		Vanadates	
	Quantity	Value	Quantity	Value
1999	8	\$14,300	174,000	\$1,640,000
2000:				
February	475	4,570	312	11,800
March	--	--	42,500	221,000
April:				
China	92	3,800	--	--
Year to date	567	8,370	78,300	430,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Bureau of the Census.